



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/043,325	01/14/2002	Young-Won Song	HI-0070	6678

34610 7590 03/30/2006

FLESHNER & KIM, LLP
P.O. BOX 221200
CHANTILLY, VA 20153

EXAMINER

BHATIA, AJAY M

ART UNIT PAPER NUMBER

2145

DATE MAILED: 03/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/043,325

Applicant(s)

SONG ET AL.

Examiner

Ajay M. Bhatia

Art Unit

2145

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 February 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 24-42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 24-42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Response to Arguments

Applicant's arguments with respect to claims 24-42 have been considered but are moot in view of the new ground(s) of rejection. Applicant has filed an RCE 2/16/2006. Applicant has submitted new claims.

Examiner thanks applicant's representative for conducting the interview.

Priority

Applicant is required to provide translation of foreign priority paper to help resolve issue with 112 rejection and provide additional clarification of the specification in addition to provide priority of the current invention over the document provided in the Notice of References Cited.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 24-42 rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter that was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. At present the specification fails to show how the data structures are generated

recursively. Therefore the examiner assumes from the specification that the intended meaning is what is commonly accepted for the creation of data structures.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 24-42 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors.

Claims 24-42 rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationships are: applicant fails to clear define the relationship between item container and component and there relationship to the digital item, types of components or items do not provided any clear definition to as the content of those types of objects.

Claim 41 us rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential elements, such omission amounting to a gap between the elements. See MPEP § 2172.01. The omitted elements are: the features of claim 42.

Claims 24-42 rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential elements, such omission amounting to a gap between the elements. See MPEP § 2172.01. The omitted elements are: are the features of the data structure, as defined by the specification different parts of the data structure are disclose though out the claims from the applicant's specification each part is necessary for the data structure to operate according to the specification.

Where applicant acts as his or her own lexicographer to specifically define a term of a claim contrary to its ordinary meaning, the written description must clearly redefine the claim term and set forth the uncommon definition so as to put one reasonably skilled in the art on notice that the applicant intended to so redefine that claim term. *Process Control Corp. v. HydReclaim Corp.*, 190 F.3d 1350, 1357, 52 USPQ2d 1029, 1033 (Fed. Cir. 1999). The term "recursive" in claims 24-42 is used by the claim to mean "encapsulation", while the accepted meaning is "subroutine or program module to call itself." The term is indefinite because the specification does not clearly redefine the term. At present if the accepted meaning is used the present invention is inoperative.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir.

Art Unit: 2145

1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 24-42 provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-34 of copending Application No. 10/102,895. Although the conflicting claims are not identical, they are not patentably distinct from each other because they both disclose the same Digital Item.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 24-42 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. "A method of generating" does not provide for a change of state of transformation of physical matter.

Claims 24-42 rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Data-structures not contained in a storage medium are not patentable, software is not patentable by itself.

Claims 24-42 rejected under 35 U.S.C. 101 because the claimed invention lacks patentable utility. At present the claims fail to produce a concrete, useful and tangible result.

Claims 24-42 rejected under 35 U.S.C. 101 because the disclosed invention is inoperative and therefore lacks utility. At present the data structure is generated recursively, which the data structure is not a sub routine therefore it is not able to call a not copy of the same object. Therefore it is inoperative.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(f) he did not himself invent the subject matter sought to be patented.

Claims 24-42 rejected under 35 U.S.C. 102(f) because the applicant did not invent the claimed subject matter. At present multiple documents retrieved from ISO standard list additional inventors that are not listed in the current application.

Claims 24-42 are rejected under 35 U.S.C. 102(b) as being anticipated by (MPEG-21) Part1 (ISO/IEC JTC1/SC29/WG11 N 3500). (Date 2000-09-03) (Please note the date provided is more than 1 year prior to the filing in the United State)

For claim 24, (MPEG-21) teaches, a method of generating Digital Item for electronic commerce activities of multimedia data, comprising the steps of:

selecting resource for electronic commerce activates of multimedia data;
((MPEG-21), page iix)

generating an atomic Digital Item which is not divided into any longer and packaged Digital Item, wherein the packaged Digital Item is defined to include any sub packaged Digital Item in a recurrent package form that the atomic Digital Item are packaged or already package are again packaged, therefore each packaged Digital Item is generated in a recursive manner; ((MPEG-21), page ix)

wherein in order to construct the recurrent layered structure, the atomic Digital Item as the lowest layer is defined as component, packaged Digital Item as the middle layer is defined as item, and /or packaged Digital Item as the highest layer is the defined as container; ((MPEG-21), page ix)

and in the step of generating the component, the component is defined to include a selected resource, anchor for designating the selected resource, optionally a descriptor for describing details of the resource, and optionally an opCondition for describing operational use conditions of the resource; ((MPEG-21), pages 12-32 and 41-43)

Art Unit: 2145

wherein the packaged Digital Item is defined to include an anchor for designating same level of Digital Item or an anchor for designating lower level of Digital Item, such that in the step of generating the item, the item is defined to include packaged content including at least one component or item or anchor for designating that, and optionally a choice for the packaged content; ((MPEG-21), pages 12-32 and 41-43)

and optionally a descriptor for describing details of the packaged content; ((MPEG-21), pages 12-32 and 41-43)

and/or in the step of generating the container, the container is defined to include packaged content including at least one item or container or anchor for designating that, and optionally a descriptor for describing details of the packaged content. ((MPEG-21), pages 12-32 and 41-43)

For claim 25, (MPEG-21) teaches, the method according to claim 24, wherein the anchor used for all Digital Items is defined to include a reference being a identifier designating uniquely a Digital Item, at least zero or more descriptor for describing the anchor, and at least zero or more opCondition for deriving usage format of the anchor. ((MPEG-21), pages 12-32 and 41-43)

For claim 26, (MPEG-21) teaches, the method according to claim 25, wherein opCondition used for anchor defines operational use conditions for corresponding item by use of at least one or more predicate which is Boolean function.

For claim 27, (MPEG-21) teaches, the method according to claim 24, wherein the atomic Digital Item as the lowest layer is defined as component, packaged Digital item as the middle layer including the component or any sub package Digital item or an anchor for designating that is defined as item, and/or packaged Digital Item as the highest layer including item or any sub container or any anchor for designating that is defined as container. ((MPEG-21), pages 12-32 and 41-43)

For claim 28, (MPEG-21) teaches, the method according to claim 24, wherein the step of generating component is defined to include selectively murCondition for describing condition related to management and use rule for the resource, eventReport for describing event to be reported in connection with the resource, userPerference for describing user preference information on the resource, or reservedMetadata for describing metadata additionally required for Digital Item definition model in the future. ((MPEG-21), pages 12-32 and 41-43)

For claim 29, (MPEG-21) teaches, the method according to claim 28, wherein UserPreference is defined to include anchor for designating the existing user preference information, and murCondiion capable of describing management and use rule of the user preference information. ((MPEG-21), pages 12-32 and 41-43)

For claim 30, (MPEG-21) teaches, the method according to claim 28, wherein murCondition used for all the Digital Items, eventReport, userPreference, and reservedMetadata defines conditions for management and use rule of a corresponding Digital Item or definition model elements by use rule of corresponding Digital Item or definition model elements by use of at least one or more predicate which is Boolean function representation language. ((MPEG-21), pages 12-32 and 41-43)

For claim 31, (MPEG-21) teaches, the method according to claim 29, wherein the opCondition describes conditions, for example transmission bit rate, resolution or video or image, sampling rate of audio, compression algorithm, key or decoding conditions if coded transmission protocol, etc. ((MPEG-21), pages 12-32 and 41-43)

For claim 32, (MPEG-21) teaches, the method according to claim 24, wherein the step of generating item is defined to include selectively murCondition for describing conditions related to management and use rule for the package content, eventReport for describing event to be reported in connection with the package content, userPreference for describing user preference information on the package content, or reservedMetadata for describing metadata additionally require for Digital Item definition model in future. ((MPEG-21), pages 12-32 and 41-43)

For claim 33, (MPEG-21) teaches, the method according to claim 32, wherein eventReport is defined to include anchor for designating a server computer for

Art Unit: 2145

processing, managing and storing the content of reportable event report, descriptor for describing the content of event report, and murCondition for describing conditions related to management and use rule of event report content. ((MPEG-21), pages 12-32 and 41-43)

For claim 34, (MPEG-21) teaches, the method according to claim 24, wherein the step of generating container is defined to include selectively murCondition for describing condition related to management and use rule of the package content, eventReport for describing event to be reported in connection with the package content, userPreference for describing user preference information on the package content, or reservedMetadata for describing metadata additionally required for Digital Item definition model in the future. ((MPEG-21), pages 12-32 and 41-43)

For claim 35, (MPEG-21) teaches, the method according to claim 24, wherein the choice is defined to include recurrent form of at least zero or more choice, at least zero or more descriptor, at least zero or more opCondition that can be used to determine whether a single selection is selected or more than one selection are selected, and at least one or more selection as the object of selection. ((MPEG-21), pages 12-32 and 41-43)

For claim 36, (MPEG-21) teaches, the method according to claim 35, wherein the selection is defined to include predicate which is Boolean function representation

Art Unit: 2145

language, at least zero or more descriptor for describing the content of the selection, and opCondition for describing operational use condition of the selection, as elements included to define the choice. ((MPEG-21), pages 12-32 and 41-43)

For claim 37, (MPEG-21) teaches, the method according to claim 24, wherein the choice is used for item level for the purpose of selective item configuration in order to adapt the Digital Item according to the various types of network and terminals, or the user request, and wherein the choice is modeled in a recurrent form considering the user generally configures item through mutli-step, so layered definition of choice is required. ((MPEG-21), pages 12-32 and 41-43)

For claim 38, (MPEG-21) teaches, the method according to claim 24, wherein descriptor used for all the Digital Items, choice, selection, eventReport, userPrederence, reservedMetadata, and anchor, is defined to include at least zero or more existing descriptors or anchor, component capable of representing the content of descriptor or statement of text or any machine readable format for describing the content such as parent element of descriptor to be defined, and at least zero or more opCondition of describing operation conditions of descriptor. ((MPEG-21), pages 12-32 and 41-43)

For claim 39, (MPEG-21) teaches, the method according to claim 24, wherein anchor used for all Digital Item, eventReport, userPreference, reservedMetadata, and descriptor, is defined to include a reference being and identifier designating uniquely

Art Unit: 2145

atomic Digital Item and each Digital Item at, least zero, or more descriptor for describing the anchor, an at least zero or more opCondition for describing usage format of the anchor. ((MPEG-21), pages 12-32 and 41-43)

For claim 40, (MPEG-21) teaches, the method according to claim 24, wherein opCondition used for Digital Item of component level, descriptor, anchor, choice, and selection defines operational use conditions for corresponding item or definition model elements by use of at least one ore more predicate which is Boolean function representation language. ((MPEG-21), pages 12-32)

For claim 41, (MPEG-21) teaches, the method of according to claim 24, wherein container item, and component are generated as Digital Item in order to provide a selected resource as the unit of manipulation for electronic commerce activites according to the following element definitions:

(a) container::=(anchor.vertline.container)* (anchor.vertline.item)*

descriptor* murCondition* eventReport* userPreference* reservedMetadata*

(b) item::=(anchor.vertline.item.vertline.component)+choice* descriptor* murCondition* eventReport* userPreference* reservedMetadata* (c) component::=resource anchor

descriptor* murCondition* opCondition* eventReport* userPreference*

reservedMetadata* (d) anchor::=reference descriptor* opCondition* (e)

descriptor::=(anchor.vertline.descriptor)* (component.vertline.statement) opCondition*

(f) choice::=choice* selection+descriptor* opCondition* (g) selection::=predicate

Art Unit: 2145

descriptor* opCondition* (h) eventReport::=anchor descriptor murCondition (i)
userPreference::=anchor descriptor murCondition (j) reservedMetadata::=anchor
descriptor murCondition (k) murCondition::=predicate+(l) opCondition::=predicate+
((MPEG-21), pages 12-32)

For claim 42, (MPEG-21) teaches, the method according to claim 41, wherein `*`
means at least zero(0) or more, `+` means at least one(1) or more, and `.` means
means `OR` logical operation. ((MPEG-21), pages 12-32)

Conclusion

The prior art made of record and not relied upon is considered pertinent to
applicant's disclosure. See attached Notice of references cited (if appropriate).

Any inquiry concerning this communication or earlier communications from the
examiner should be directed to Ajay M. Bhatia whose telephone number is (571)-272-
3906. The examiner can normally be reached on M-F 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's
supervisor, Jason Cardone can be reached on (571)272-3933. The fax phone number
for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jason Cardone
Supervisor Patent Examiner
Art Unit 2145

AB